

### Statement of Work

This Statement of Work (SOW) is written to specify support for the NPP development effort. The NSS/NSC is being upgraded as a result of this effort. The upgrade requires replacement of approximately 350K lines of source code, mostly Fortran. It is estimated that this effort will ultimately result in between 200K and 250K of source code, probably written in C or C++. JPL will employ Structured Analysis and Design Methodology in this development effort and will perform the development on a SUN networked, workstation, UNIX/Windows environment. Since this project is in its early stages, this SOW specifies capabilities required for project startup and initial design. It is expected that this will grow into implementation, including integration and test support. Work is expected to occur primarily in the Sierra Madre Villa JPL facility in building 525, but may utilize space in the ISDS facility when cost effective and/convenient for JPL.

- The early stages of the project will involve analysis and requirements definition and training of the development staff in Structured Analysis and Design methodology and general application of the development environment selected. At a later stage in the project, when requirements have been defined in more detail, specific tasks may be defined to ISDS with specific deadlines and deliverables. The contractor shall perform analysis to provide development requirements for NPP. Documentation of this analysis shall consist of Functional Requirements Documents (FRD) and System Requirements Documents (SRD) as appropriate.
- Define NCP interfaces, including Functional Addressing Services, Monitor Control Services, Database and Catalog Services, and Data Delivery Services. These interfaces shall be defined to a level that will allow NPP programming staff to execute calls from their programs to use these services.
- Define Utility Services.
- Define NPP Support Services.
- Define Work Flow Management Services.
- Define NPP Analysis and Maintenance Tools.
- Provide training in System Engineering using Structured Analysis and Design. Computer based instruction is encouraged for this training. Training shall be provided as follows.

1. Insure experienced staff are all using the same terminology and have a common understanding of the process, and
2. Insure less experienced staff, are able to apply the basic methodology and perform detailed design using the methodology.

## **Deliverables**

Deliverables shall consist of the following:

- Programmer Reference Manual for NCP interfaces, to be used by NPP programming staff or other NCP staff in NPP/NCP development. Define Utility Services.
- NPP Support Services FRD.
- Work Flow Management Services FRD.
- NPP Analysis and Maintenance Tools FRD.
- Training Plan.
- Test materials to insure completion of informal training.

All deliverables except the Training Plan, listed above, shall be provided by no later than 1 Feb 96. The training plan shall be provided no later than 1 Dec 95.

The intention of these deliverables is to prepare the NPP staff for software development which will begin in February, 1996. It is further intended that the results of this SOW provide the specification for a SOW to provide JPL a product or products relating directly to NPPdevelopment.